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10/552,375

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Jean-Luc Gesztes

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05/13/2009

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EXAMINER

FRAZIER, BARBARA S

ART UNIT

PAPER NUMBER

1611

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/552,375	<b>Applicant(s)</b> GESZTESI ET AL.	
	<b>Examiner</b> BARBARA FRAZIER	<b>Art Unit</b> 1611	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 29 December 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-7 and 9-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 and 9-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Status of Claims***

1. Claims 1-7 and 9-11 are pending in this application.
2. Cancellation of claim 8 is acknowledged.
3. Addition of new claims 10 and 11 is acknowledged.
4. Claims 1-7 and 9-11 are examined.

### ***Claim Rejections - 35 USC § 112***

5. The previous rejection of claim under 35 U.S.C. 112, second paragraph and 35 U.S.C. 101, is now considered moot in light of Applicant's cancellation of claim 8.
6. The rejection of claims 1-9 under 35 U.S.C. 112, second paragraph, is withdrawn in view of Applicant's amendment to claim 1.
7. The rejection of claim 6 under 35 U.S.C. 112, second paragraph, is withdrawn in view of Applicant's amendment to claim 6.

### ***Claim Rejections - 35 USC § 103***

8. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
9. **Claims 1-7 and 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pineau et al (US Patent 6,296,856).**

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The claimed invention is drawn to an antiaging cosmetic composition for the skin, characterized in that it comprises at least one rhamnose compound RROPs which are polysaccharides composed of 50% rhamnose, one fucose compound FROPs which are polysaccharide made of polymers of a trisaccharide comprising galactose, acetyl-galacturonic acid and fucose, and a cosmetically acceptable excipient (see claim 1).

Pineau et al teach cosmetic/pharmaceutical/dermatological compositions which are intended to promote desquamation of the skin and/or to stimulate epidermal renewal and, thus, to combat intrinsic and/or extrinsic aging of the skin, that comprises heterogeneous polyholosides, which is a combination of oligo and polysaccharides (Abstract and column 3, lines 25-65). The heterogeneous polyholosides are comprised of at least two different oses (col. 3, lines 25-42) which may be selected from dioxyoses such as rhamnose, and hexoses such as fucose (col. 3, lines 47-63). A more preferred polyholoside comprises fucose, galactose, and galacturonic acid structural units (col. 4, lines 8-12), which reasonably reads on the "fucose compound FROPs" of the claimed invention. A mixture of heterogeneous polyholosides may be used (col. 4, lines 18-20). The compositions also may include cosmetically acceptable vehicles, diluents or carriers (col. 4, lines 65-67), which reasonably read of the term "cosmetically acceptable excipient".

Pineau et al do not specifically teach that the "mixture of heterogeneous polyholosides" includes its preferred fucose polyholoside (see col. 4, lines 9-12) with a rhamnose compound RROP, i.e, a polysaccharide compound composed of 50% rhamnose.

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However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to look at the guidance provided by Pineau et al and incorporate a mixture of polyholosides including both fucose and rhamnose in the composition; thus arriving at the claimed invention. One would have been motivated to do so, with a reasonable expectation of success, because Pineau et al teach that the polyholoside comprising fucose, galactose, and galacturonic acid is preferred (col. 4, lines 9-12), and suggests the use of a mixture of heterogeneous polyholosides (Abstract and column 4, lines 18-20). It would be within the purview of the skilled artisan to select another heterogeneous polyholoside (to be used with the fucose-containing polyholoside) from the finite list provided by Pineau et al (col. 3, lines 55-65) by routine experimentation, in order to optimize properties of the resultant composition, such as promoting desquamation of the skin and stimulating epidermal renewal and thus, combating cutaneous aging, while minimizing negative effects, such as stinging and burning (col. 3, lines 39-50).

Regarding the limitation that the rhamnose compound is a polysaccharide composed of 50% rhamnose, Pineau et al teach that the polyholosides advantageously comprise from 2 to 10 oses (col. 3, lines 47-50). Therefore, the rhamnose-containing polyholoside would comprise from about 1% to about 99% rhamnose. This amount encompasses that of the claimed invention; one skilled in the art would be motivated to select an amount of rhamnose, including 50% (the amount in the claimed invention), by routine experimentation, in order to optimize properties of the resultant composition, such as promoting desquamation of the skin and stimulating epidermal renewal and

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thus, combating cutaneous aging, while minimizing negative effects, such as stinging and burning (col. 3, lines 39-50).

Regarding the relative weight amounts of rhamnose compound RROPs and fucose compound FROPs (claims 2-5), Pineau et al teach that a mixture of heterogeneous polyholosides may be used (col. 4, lines 18-20). Therefore, the weight amounts of each polyholoside relative to the total weight of the polyholoside mixture would be about 1% to about 99%. This amount range encompasses the relative weight amounts of the claimed invention. One skilled in the art would be motivated to select relative weight amounts of each polyholoside from within said ranges by routine experimentation, in order to optimize properties of the resultant composition, such as promoting desquamation of the skin and stimulating epidermal renewal and thus, combating cutaneous aging, while minimizing negative effects, such as stinging and burning (col. 3, lines 39-50).

Regarding claim 6, Pineau et al teach that the composition is topically applied (abstract) and includes topically applicable vehicles, diluents or carriers (col. 4, lines 65-67), and therefore is suitable for topical application.

Regarding claim 7, Pineau et al teach that the polyholoside mixture is advantageously present in the composition in a preferable amount of from 0.01% to 15% by weight (col. 4, lines 55-58). This amount range encompasses that of the claimed invention; one skilled in the art would be motivated to manipulate the amount of the polyholoside(s) from within said ranges by routine experimentation, in order to optimize properties of the resultant composition, such as promoting desquamation of

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the skin and stimulating epidermal renewal and thus, combating cutaneous aging (col. 2, lines 46-50).

Regarding claim 9, Pineau et al teach that the composition comprising the heterogeneous polyholoside(s) is topically applied to the skin (abstract)

Regarding claim 10, Pineau et al teach that the composition may be in the form of a cream (col. 5, line 5).

Regarding claim 11, Pineau et al teach that the polyholoside composition promotes desquamation of the skin and stimulates epidermal renewal and thus, combats cutaneous aging (col. 2, lines 46-50).

### ***Response to Arguments***

10. Applicant's arguments filed 12/29/08 have been fully considered but they are not persuasive.

Applicants argue that Pineau fails to disclose the combination of at least one rhamnose compound RROPs which are polysaccharides composed of 50% rhamnose, one fucose compound FROPs which are polysaccharide made of polymers of a trisaccharide comprising galactose, acetyl-galacturonic acid and fucose, let alone in a cosmetically acceptable excipient.

This argument is not persuasive because Pineau et al teach that a polyholoside comprising fucose, galactose, and galacturonic acid is preferred (col. 4, lines 9-12), and suggests the use of a mixture of heterogeneous polyholosides (Abstract and column 4, lines 18-20). It would be within the purview of the skilled artisan to select another heterogeneous polyholoside (to be used with the fucose-containing polyholoside) from

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the finite list provided by Pineau et al (col. 3, lines 55-65), which includes rhamnose-containing polysaccharide, by routine experimentation, in order to optimize properties of the resultant composition, such as promoting desquamation of the skin and stimulating epidermal renewal and thus, combating cutaneous aging, while minimizing negative effects, such as stinging and burning (col. 3, lines 39-50). Furthermore, one skilled in the art would be motivated to select an amount of rhamnose in the rhamnose-containing polysaccharide, including an amount of 50% (the amount in the claimed invention), by routine experimentation, in order to optimize properties of the resultant composition, such as promoting desquamation of the skin and stimulating epidermal renewal and thus, combating cutaneous aging, while minimizing negative effects, such as stinging and burning (col. 3, lines 39-50).

Applicants also argue that they have surprisingly found that there is a synergistic effect in this combination as is evidenced in the examples and data at in particular paragraphs 27 and 47 of US Publication 20060115443. Applicants argue that such combinations are not taught or suggested by Pineau and more importantly, Pineau fails to identify that these combinations would interact synergistically; the sum being more than the individual parts. Applicants conclude that this is a surprising and unappreciated result and one certainly not contemplated by Pineau.

This argument is not persuasive. The data present in Applicants specification has been fully considered; however, said data is neither synergistic nor unexpected. The data is not synergistic because it merely demonstrates that a composition comprising a 1% concentration of polysaccharide is more effective than a composition



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comprising a 0.25% concentration or a 0.75% concentration. This appears to be a dose-dependent relationship, not a synergistic one. Additionally, Pineau et al disclose that a mixture of heterogeneous polyholosides may be used (col. 4, lines 9-12) in order to stimulate epidermal renewal and combat signs of aging (abstract and col. 2, lines 49-50), and therefore said results are not unexpected.

### ***Conclusion***

11. Applicant's amendment necessitated any new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BARBARA FRAZIER whose telephone number is (571)270-3496. The examiner can normally be reached on Monday-Thursday 9am-4pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sharmila Landau can be reached on (571)272-0614. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

BSF

/Lakshmi S Channavajjala/  
Primary Examiner, Art Unit 1611  
May 8, 2009

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